

DETERMINATION OF THE INDIVIDUAL CARIOUS RISK TO A GROUP OF YOUNG PEOPLE

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Abstract:

Aim of the study: This study aims at determining the carious risk of a group of young people. **Material and methods:** The study has been done on a group of 133 students. To determine the caries risk was used PC cariograma. **Results:** 76.76% have a low consumption of fermentable carbohydrates and a balanced diet, characterized by consumption of up to 5 times / day. 93% of all shows good oral hygiene. 86.6% of students using means adjuvant tooth brushing. **Conclusions:** Intermediate risk caries is frequent in the age group up to 25 years, as opposed to subjects aged over 25 years, the prevailing low caries risk.

Key words: cariogram, caries risc, young peoples

To determine the individual carious risk represents the success in re-establishing and maintaining the oral health by finding out as early as possible the factors which can both affect the odonto- periodontal integrity and pre-disposal of the individual for this type of diseases (2, 3).

The passage from the incipient, non-cavity, reversible lesion towards the cavity which is irreversible is a slow process, achieved by disturbing the equilibrium between the processes of demineralization and mineralization, unfortunately in favor of the first (4,6). So, the diagnosis of the dental decay, apparently simple, proves to be in a difficult decision; that is why the clinical exam is recommended in association with further exams.

This study aims at determining the caries risk of a group of young people.

MATERIAL AND METHOD

The study has been done on a group of 133 students from the 3th year from the Faculty of Dentistry, Sana'a University, during October 2015- October 2016. The group consisted of 85 female subjects (63, 90%) and 48 male subjects (36, 09%) with a medium of age of years old 24, 7 (minimum 24,12 years of age, maximum 30 years old). The risk of dental decay disease was determined to every subject in order to establish the period of repeating the clinical exam.

RESULTS AND DISCUSSIONS

From 133 subjects examined, around 16,6% had their teeth perfect. On the other hand, quite a high percent (60%) had a CAO-D 3, artificially increased on account of the sealed teeth (fig. 1). This means an awareness of necessary preventive and restorative treatment to the subjects of the study.

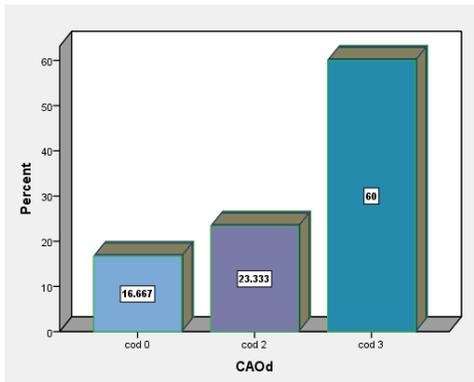


Fig. 1. Frequency of carious lesions, of the missing teeth and sealed to the study group

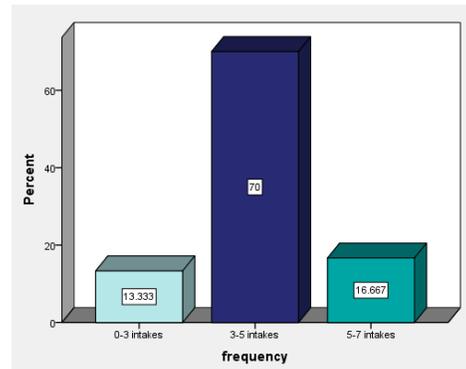


Fig. 3. The frequency of consuming fermentable food

A correct teeth brushing , usually associated with additional means of brushing was a decisive factor on the dental health of the subjects. Thus, 93% of the subjects had a good dental hygiene.

As far as food factor is concerned, a high percent of the whole subjects (76, 76%) have a low consumption of fermentable food and only 3.33 % consume fermentable food (fig. 2).

A balanced diet, characterized by a 5 times per day consumption is met to the majority of the subjects included in the study as it can be seen in the next figure.

A correct teeth brushing , usually associated with additional means of brushing was a decisive factor on the dental health of the subjects. Thus, 93% of the subjects had a good dental hygiene.

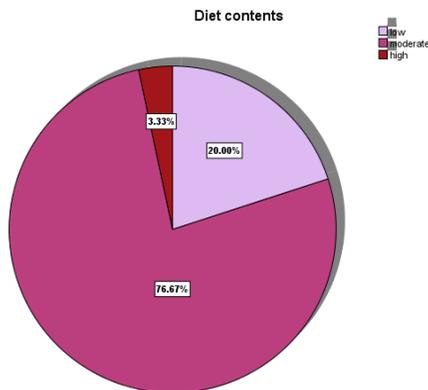


Fig. 2. Involving of fermentable food consumption

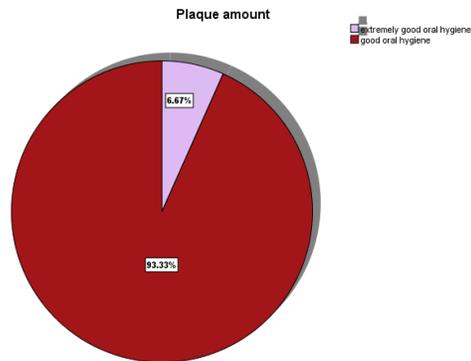


Fig. 4. The oral dental hygiene

Additional means for brushing are noticed in a close association to around 86, 6% of the subjects (fig. 5).

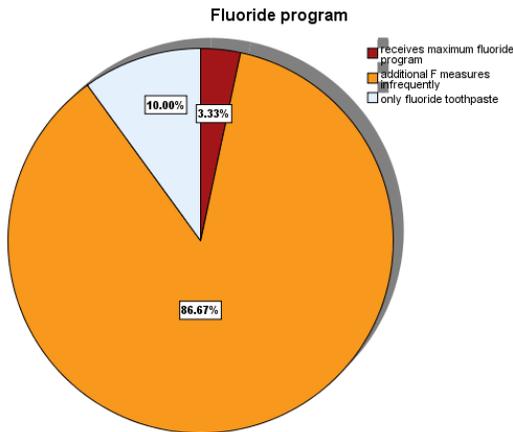


Fig. 5. The additional means for brushing

Saliva factor influences cleaning and self-cleaning, increasing or decreasing the carious risk, 96,6% of the subjects consider that they have a normal saliva secretion both qualitative and quantitative, related with the lack of affecting their general health (fig. 6).

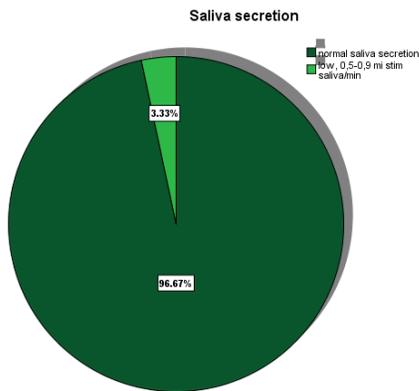


Fig. 6. The saliva factor appreciated quantitatively

The particularities of the clinical cases will indicate a further therapeutic behavior. In this respect, the evaluation of the subjects concerning the degree of affecting the dental structures offers good directions of the

CAOD prevalence. Thus, the Pearson test allow to establish some correlations between CAOD indicator and the two demographic parameters (age and sex). The results are presented in tables 1.

Table 1. Statistical analysis with the correlations CAOD indicator(age, sex)

		sex	CA Od	var sta
sex	Pearson Correlation	1	-	.117
	Sig. (2-tailed)		.181	.337
	N	30	30	30
CA Od	Pearson Correlation	-	1	-
	Sig. (2-tailed)	.181		.182
	N	30	30	30
var sta	Pearson Correlation	.117	-	1
	Sig. (2-tailed)	.337	.182	
	N	30	30	30

It can be noticed that until 23 years of age code 2 of of the carious experience is met especially in the female subjects (the degree is quite high), unlike the male subjects. The situation changes in the subjects over 23 years of age, where an odontal integrity can be visibly noticed especially in female subjects (90% from the total of female subjects had code 1 and approximately 60% of the male subjects also had this code). As far as fermentable food is concerned, it can be noticed that both qualitatively and quantitatively appreciated is a maximum consumption of 5 times per day in the subjects until 23 years old, unlike the other

category of age where a lower consumption of maximum 5 times per day is dominant to 90% of the subjects and 7 times per day prevails to 10% of the subjects.

Studies that have been made so far indicate the fact that there is a low trend of oro-dental affections in the last decades, this situation was present in countries where in the 80s there was a decrease of the carious risk to children and teenagers (7, 8, 9).

It is difficult to determine the trend or direction of the carious experience to a population, because the carious affection has multiple factors. Changes in diet, using fluoride products, the prevention programs in schools but also the health behavior have the tendency to individualize the evolution from one person to another. Longitudinal studies allow to notice the progression of the affection in time, connected with etiological and preventive factors as well (10,11). Although they cannot show the prevalence of the disease in a certain group of both age and period of time.

Comparing data of different studies achieved cross-sectional during a long period of time, it was noticed that they can show the tendency of the carious experience, though these methods have some risks. The differences in methodology, in the way of creating the groups of study and the control of risk factors indicate the fact that

CONCLUSIONS

The probability to develop dental decay in the future is closely related to the carious risk of the patient. Thus, the rising of the value in the probability sector is correlated with the decrease in the sectors of the determinant factors, having as a result the

comparing two sets of data is not possible. However, the cross-sectional comparison method is so far the most efficient in order to observe the distribution and progression of the dental decay (5, 7).

Comparing the results of the present study with the few existing data in the specialized dentistry literature, it can be noticed that there is a high number of subjects with incipient carious lesions; there is also a great number of subjects with deep carious lesions, as well as with missing teeth due to dental decay disease; that is why it is very important to detect the etiological factors, although this study has been made on a low number of subjects for an age category (1, 11).

The influence of sex in the frequency of dental decays was obvious in the study which has been done, spotting the fact that, although the feminine gender is more careful at the esthetic aspect than the male one, also a high number of dental decay affection was noticed in this category. In this study, it was also noticed that an important category with carious affection was from the rural surroundings, in this way we could establish a direct connection between a diet consisting of hard fibrous food and another one made of refined, processed food associated with the socio-economic status on the other hand

decrease of the carious risk. So, a patient with a low probability will have a high dental decay risk and a patient with a high probability will have a low dental decay risk, a thing that has been demonstrated by this study.

Even if there is only one major

determinant (food, individual dental decay experience, bacterial plate, certain circumstances) , what would reflect a major dental decay risk in the past, now the situation can be kept under control

improving the other determinants. Knowing the rules of preventing, putting them correctly into practice and giving all the information every patient needs, play an essential role in the oral health.

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